UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 6, 2008

Ms. Lori Podolak
Product Licensing Specialist
Regulatory Affairs Department
QSA Global, Inc.
40 North Avenue
Burlington, MA 01803

SUBJECT: CERTIFICATE OF COMPLIANCE NO. 9296 FOR THE MODEL NO. 880 PACKAGE

Dear Ms. Podolak:

As requested by your application dated December 19, 2007, supplemented March 17, 2008, enclosed is Certificate of Compliance No. 9296, Revision No. 7, for the Model No. 880 Series Packages. Changes made to the enclosed certificate are indicated by vertical lines in the margin. The staff's Safety Evaluation Report is also enclosed.

Those on the attached list have been registered as users of the package under the general license provisions of 10 CFR 71.17 or 49 CFR 173.471. The approval constitutes authority to use the package for shipment of radioactive material and for the package to be shipped in accordance with the provisions of 49 CFR 173.471.

If you have any questions regarding this certificate, please contact me or Jessica Glenny of my staff at (301) 492-3285.

Sincerely,

Meraj Rahimi, Acting Chief
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-9296
TAC No. L24169

Enclosures: 1. Certificate of Compliance
No. 9296, Rev. No. 7
2. Safety Evaluation Report
3. Registered Users

cc w/encls 1 & 2: R. Boyle, Department of Transportation
J. Shuler, Department of Energy
Registered Users

NRC FORM 618
(8-2000)
10 CFR 71

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES

1 a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
9296	7	71-9296	USA/9296/B(U)-96	1 OF	4

2 PREAMBLE

a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."

b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.

3 THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION

a. ISSUED TO *(Name and Address)*

QSA Global, Inc.
40 North Avenue
Burlington, MA 01803

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

QSA Global, Inc., consolidated application dated October 20, 2005.

4 CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

5.

(a) Packaging

(1) Model No. 880 Series Packages

(2) Description

The Model No. 880 series packages are designed for use as a radiography exposure device and a transport package for Type B quantities of radioactive material in special form. The Model No. 880 has three versions called the 880 Delta, 880 Sigma and the 880 Elite. The 880 Delta has a maximum capacity of 150 Curies of Iridium-192 or 150 Curies of Selenium-75, the 880 Sigma has a maximum capacity of 130 Curies of Iridium-192 or 150 Curies of Selenium-75, and the 880 Elite has a maximum capacity of 50 Curies of Iridium-192 or 150 Curies of Selenium-75. The Delta and Sigma versions are identical and the Elite has a lighter weight depleted uranium shield. An optional jacket can be placed on the packages when they are used as an industrial radiography exposure device or a transport package.

All versions of the package, without the jacket, are cylindrical in shape with a diameter of 5 inches and a length of 13 5/16 inches. With the jacket, the shape of the packages is an extruded triangle 9 inches high, 7 ½ inches wide, and 13 5/16 inches long. The weight of the Delta and Sigma versions is 46 pounds (52 pounds with the jacket) and the Elite version is 37 pounds (42 pounds with the jacket).

The major components of the packages consist of a welded stainless steel cylindrical body, a depleted uranium shield, a stainless steel rear plate with a locking assembly, a stainless steel front plate with a shielded port, and an optional jacket.

5.(a) (2) Description (continued)

The welded cylindrical body consists of a 5 inch diameter, 0.06 inch wall tube shell with 0.12 inch end-plates. A U-bracket is welded to each end-plate and is located on the inside cavity of the shell tube. The depleted uranium shield is centrally located within the welded body between the end-plate and is fastened to each U-bracket by a 0.37 inch diameter titanium shield pin. A U-shaped copper spacer fills the gap between the shield and the U-bracket. An S-shaped titanium source tube is cast into the center of the shield to provide a cavity for the source wire assembly to travel through during use.

The front and rear plates are attached to the welded body with four tamperproof screws through rivnuts assembled into end-plates. The rear plate assembly consists of a source locking mechanism fastened to the rear plate. The front plate assembly consists of a shielded port mechanism contained within the front plate.

An optional polyurethane jacket covers the package cylinder and provides a handle and a stable base. The jacket handle contains a wire molded in for additional reinforcement.

(3) Drawings

The packaging is constructed in accordance with the AEA Technology/QSA, Inc., drawings R88000, Rev. L, Sheets 1-5.

(b) Contents

(1) Type and form of material

Iridium-192 as a sealed source which meets the requirements of special form radioactive material.

Selenium-75 as a sealed source which meets the requirements of special form radioactive material.

(2) Maximum quantity of material per package

150 Curies (5.55 TBq) (output) Ir-192 for the Model No. 880 Delta.
150 Curies (5.55 TBq) (output) Se-75 for the Model No. 880 Delta.

130 Curies (4.81 TBq) (output) Ir-192 for the Model No. 880 Sigma.
150 Curies (5.55 TBq) (output) Se-75 for the Model No. 880 Sigma.

50 Curies (1.85 TBq) (output) Ir-192 for the Model No. 880 Elite.
150 Curies (5.55 TBq) (output) Se-75 for the Model No. 880 Elite.

5. (b) (2) Contents (continued)

Output curies are determined by measuring the source output at 1 meter and expressing its activity in curies derived from the following: 0.48 R/hr - Ci Iridium-192 at 1 meter and 0.20 R/hr - Ci Selenium-75 at 1 meter. (Ref: Radiological Health Handbook, rev. ed., U.S. Public Health Service, Bureau of Radiological Health, Rockville, MD, 1970.)

6. The source shall be secured in the shielded position of the packaging by the source assembly lock, lock cap and safety plug assembly. The safety plug assembly, lock cap and source assembly must be fabricated of materials capable of resisting a 1475°F fire environment for one-half hour and maintaining their positioning function. The locking ball of the source assembly must engage the locking device. The flexible cable of the source assembly and safety plug assembly must be of sufficient length and diameter to provide positive positioning of the source in the shielded position.

7. The name plate must be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 and maintaining its legibility.

8. In addition to the requirements of Subpart G of 10 CFR Part 71:

   (a) The package must meet the Acceptance Tests and Maintenance Program of Chapter 8.0 of the application; and,

   (b) The package shall be prepared for shipment and operated in accordance with the Operating Procedures in Chapter 7.0 of the application.

9. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17.

10. Revision No. 6 of this certificate may be used until June 30, 2009.

11. Expiration date: March 31, 2011.

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES

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REFERENCES

QSA Global, Inc., consolidated Safety Analysis Report dated October 20, 2005.

Supplements dated: July 19 2006; December 19, 2007; and March 17, 2008.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Meraj Rahimi, Acting Chief
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Date: June 6, 2008.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION REPORT
Docket No. 71-9296
Model No. 880 Series Packages
Certificate of Compliance No. 9296
Revision No. 7

SUMMARY

By application dated December 19, 2007, supplemented March 17, 2008, QSA Global, Inc. (QSA) submitted an amendment request for Certificate of Compliance (CoC) No. 9296 for the Model No. 880 Series Packages. QSA requested revisions to Drawing No. R88000, to add an optional ball detent to the slider mechanism and to increase the maximum depleted uranium (DU) shield weight of the Model No. 880 Series Packages.

EVALUATION

QSA requested a revision to Drawing No. R88000 to add an optional ball detent as part of a slider mechanism for the front plate shutter, as illustrated in Sheet 4 of 5. This design change will affect the operation of the shutter when the package is used as a radiation exposure device.

Drawing No. R88000, Sheet 5 of 5, Revision J, illustrates the DU shield assembly for the Model Nos. 880 Delta, 880 Sigma, and 880 Elite. The drawing specifically states that the maximum DU shield weight for the Model Nos. 880 Delta and 880 Sigma, and Model No. 880 Elite are 34 lbs, and 25 lbs, respectively. The weights listed in the drawing for the Model No. 880 Series Packages are the upper limit with which the packages must be in accordance with. QSA submitted an amendment request to revise Drawing No. R88000, to increase the maximum DU shield weight to 34.4 lbs for the Model Nos. 880 Delta and 880 Sigma, and for consistency, the maximum DU shield weight for the Model No. 880 Elite is now listed as 25.0 lbs versus 25 lbs. The weight increase of the DU shields is bounded by the maximum total package weight with and without the jacket for the Model Nos. 880 Delta, 880 Sigma, and 880 Elite.

Condition No. 5(a)(3) has been revised to show Drawing No. R88000, Revision L, as the latest version of the drawing.

Condition No. 10 was revised to authorize the use of Revision No. 6 of the certificate for a period of approximately one year, ending on June 30, 2009.

CONCLUSION

The NRC staff reviewed the amendment request for the Model No. 880 Series Packages and concluded that the requested design changes have been adequately described and do not affect the ability of the package to meet the requirements of 10 CFR Part 71.

Issued with Certificate of Compliance No. 9296, Revision No. 7
on June 6, 2008.